

WHAT IS CLAIMED IS:

- 1 1. A pocket tool comprising:
2 a housing body having two mutually opposite side faces bounding defining at least a
3 first housing area between said side faces;
4 at least a first implement displaceable out of a stowed position inside said first
5 housing area into an operating position outside of said first housing area;
6 wherein said first implement has:
7 a housing case with oppositely lying side walls having side faces extending
8 substantially parallel and spaced apart from each other, and slim faces extending between
9 said side walls; and
10 at least one lighting means arranged on a slim face of said housing case and emitting
11 a beam outwardly from said housing body and at an angle to a plane oriented perpendicular
12 to said longitudinal axis of said pocket tool.
- 1 2. A pocket tool as in claim 1, wherein said angle of said beam is adjustable.
- 1 3. A pocket tool as in claim 1, wherein said lighting means is an LED or IRED.
- 1 4. A pocket tool as in claim 1, wherein said angle of said beam is between
2 approximately 0° and approximately 170°.
- 1 5. A pocket tool as in claim 4, wherein said angle of said beam is between
2 approximately 30° and approximately 140°.
- 1 6. A pocket tool as in claim 5, wherein said angle of said beam is approximately 50°.
- 1 7. A pocket tool as in claim 1, wherein said first implement has at least one energy
2 storage device.
- 1 8. A pocket tool as in claim 7, wherein said energy storage device is a battery or a solar
2 cell.
- 1 9. A pocket tool as in claim 1, wherein said first implement has at least one power
2 consumer in addition to said lighting means.

- 1 10. A pocket tool as in claim 9, wherein said power consumer is a display unit.
- 1 11. A pocket tool as in claim 10, wherein said display unit is an LCD display.
- 1 12. A pocket tool as in claim 9, wherein said power consumer is an input unit.
- 1 13. A pocket tool as in claim 12, wherein said power consumer is a key pad, a tip
2 switch, a pressure sensor, or a touch screen.
- 1 14. A pocket tool as in claim 9, wherein said power consumer is a microprocessor.
- 1 15. A pocket tool as in claim 14, wherein said microprocessor has a data memory.
- 1 16. A pocket tool as in claim 9, wherein said power consumer is an electronic
2 transmitter and/or receiver module.
- 1 17. A pocket tool as in claim 1, wherein said first implement has an electronic circuit for
2 said lighting means.
- 1 18. A pocket tool as in claim 1, wherein said first implement has a switch mechanism
2 for said lighting means.
- 1 19. A pocket tool as in claim 18, wherein said switch mechanism has an operating
2 element provided on another, freely accessible slim face of said housing case remote from
3 said housing body when said first implement is in said stowed position and said operating
4 position.
- 1 20. A pocket tool as in claim 19, wherein said operating element of said switch
2 mechanism is connected to a strip-shaped retaining arm displaceable between an initial
3 position and an operating position.
- 1 21. A pocket tool as in claim 20, wherein:
2 said retaining arm has two guide webs spaced apart from each other;
3 a switch contact is guided between said guide webs and coupled to said retaining
4 arm; and

5 when said retaining arm is in said initial position, said switch contact is positioned
6 apart from an opposite contact, and when said retaining arm is in said operating position
7 said retaining arm sits against and is electrically connected to said opposite contact.

1 22. A pocket tool as in claim 21, wherein said opposite contact is an energy storage
2 device.

1 23. A pocket tool as in claim 20, wherein:
2 said retaining arm:
3 has a first terminal end and a second terminal end;
4 is longitudinally slideable by means of a first bearing surface provided in the
5 region of said first terminal end on a switch block; and
6 is pivotable relative to said bearing surface; and
7 a second bearing surface is provided in the region of said second terminal end lying
8 on a guide block to guide said retaining arm in its longitudinal direction.

1 24. A pocket tool as in claim 1, wherein:
2 said housing body has two oppositely lying spaced apart side walls forming said side
3 faces of said housing body; and
4 said housing case is pivotably mounted between said side walls about an axis
5 extending perpendicular to said side faces, or slidable relative to said first housing area on
6 or in said housing body.

1 25. A pocket tool as in claim 24, wherein said housing case has a bearing bore extending
2 concentrically with said axis perpendicular to said side walls.

1 26. A pocket tool as in claim 24, wherein:
2 at least one other housing area is defined between said side walls of said housing
3 body; and
4 said pocket tool has at least one other implement displaceable from a stowed
5 position inside said other housing area into an operating position outside said other housing
6 area.

1 27. A pocket tool as in claim 1, further comprising at least one of an electronic circuit
2 for said lighting means and/or at least one energy storage device and/or at least one power

3 consumer and/or a switch mechanism electrically connected to said lighting means by line
4 connections and arranged separately from said first implement and integrated in said
5 housing body externally thereto or disposed in a cover plate attached to said side wall or in
6 said side wall.

1 28. A pocket tool as in claim 1, wherein:

2 said housing body has a base plate and a cover plate lying opposite each other and
3 coupled to each other;

4 said base plate and said cover plate form parallel mutually facing internal side faces
5 in at least certain regions; and

6 housing areas, separated from one another in at least certain regions by means of
7 webs, extend between and in a plane parallel to said base plate and said cover plate for said
8 displaceable first implement and at least one other removable implement.

1 29. A pocket tool as in claim 28, wherein:

2 several webs are distributed across said internal side face of at least one of said base
3 and said cover plate;

4 said webs at least partially separated from one another and project out from said side
5 face of said at least one of said base plate and said cover plate towards the other of said base
6 plate and said cover plate;

7 said webs have a height extending across at least a part of a total internal height
8 between said side faces of said base plate and said cover plate;

9 said webs bound at least certain regions of said respective housing area when said
10 cover plate is coupled to said base plate.

1 30. A pocket tool as in claim 28, wherein several webs:

2 are distributed across said internal side face of at least one of said base plate and said
3 cover plate;

4 are formed on said side face at least partially separated from one another;

5 project out from said at least one of said base plate and said cover plate towards the
6 other of said base plate and said cover plate;

7 have a height extending across at least a part of a total internal height between said
8 internal side faces of said base plate and said cover plate; and

9 bound at least certain regions of said respective housing area when said cover plate
10 is placed on said base plate.

1 31. A pocket tool as in claim 30, wherein said webs:
2 have a height corresponding to approximately a total internal height between said
3 internal side faces of said base plate and said cover plate;
4 lie adjacent to one another when said cover plate is placed on said base plate;
5 abut at terminal edges facing said internal side faces of said base plate and said
6 cover plate with said internal side faces of said base plate and said cover plate; and
7 are joined by means of a joining element.

1 32. A pocket tool as in claim 30, wherein:
2 said webs are respectively arranged opposite one another on said base plate and said
3 cover plate; and
4 when said cover plate is placed on said base plate, said webs extend towards one
5 another and together form a continuous web from said base plate to said cover plate.

1 33. A pocket tool as in claim 28, wherein said housing case of said implement is
2 pivotably mounted on one of said base plate or said cover plate about an axis extending
3 perpendicular to said internal side faces, or is slidable relative to said base plate and said
4 cover plate in a plane extending parallel to said internal side faces.

1 34. A pocket tool as in claim 33, wherein:
2 said housing case of said implement is designed in the shape of a segment of a circle
3 and is provided with a bearing bore disposed concentrically with said axis perpendicular to
4 said internal side faces; and
5 said lighting means is disposed on a slim face remote from said housing body and
6 radially offset from said bearing bore.

1 35. and being joined at their terminal edges facing said respective side face of said base
2 or cover plate to said respective side face of said base or cover plate by means of a joining
3 element, in particular an adhesive or weld seam.

1 36. A pocket tool as in claim 1, further comprising an electronic circuit for said lighting
2 means, and/or at least an energy storage device and/or at least one power consumer, and/or a

3 switch mechanism electrically connected to said lighting means via line connections and/or
4 switch contacts and arranged separately from said first implement, externally to it,
5 integrated in said housing body, or in said base plate and/or said cover plate.

1 37. A pocket tool as in claim 1, wherein:

2 said housing body includes a control block projecting out beyond the internal
3 contour of said housing case; and

4 said first has a positioning element moveable via said control block between an
5 initial position and an operating position.

1 38. A pocket tool as in claim 37, wherein:

2 said lighting means has a first terminal contact and a second terminal contact;

3 said positioning element is in the form of an electrically conductive switch contact
4 electrically connected to said first terminal contact of said lighting means:

5 said switch contact is electrically isolated from a first terminal face of an energy
6 storage device in its initial position and is electrically connected to a first terminal face of
7 the energy storage device in its operating position; and

8 said second terminal contact of said lighting means is permanently electrically
9 connected to a second terminal face of the energy storage device.

1 39. A pocket tool as in claim 37, wherein:

2 said lighting means has a first terminal contact and a second terminal contact;

3 said second terminal contact of said lighting means is permanently electrically
4 connected to a second terminal face of an energy storage device

5 said positioning element is in the form of a flexible arm coupled to said first terminal
6 contact of said lighting means; and

7 when said positioning element is in its initial position, said first terminal contact of
8 said lighting means is electrically isolated from a first terminal face of an energy storage
9 device and, when said positioning element is in its operating position, said first terminal
10 contact of said lighting means is electrically connected to the first terminal face of the
11 energy storage device.

1 40. A pocket tool as in claim 1, wherein said implement can be locked in its stowed
2 position and/or operating position by means of a catch or snap-fit mechanism provided
3 between it and said housing body.

1 41. Pocket tool as in claim 1, wherein said first implement has a lighting means housing
2 pivotably mounted about an axis oriented perpendicular to said side faces and in which said
3 at least one lighting means is accommodated.

1 42. A pocket tool as in claim 1, wherein:
2 said housing case has two housing parts respectively forming said side walls; and
3 said slim faces project out vertically from said side walls.

1 43. A pocket tool as in claim 42, wherein said slim faces are releasably joined to one
2 another by a catch or snap-fit or plug-in or clamp connection

1 44. A pocket tool as in claim 42, wherein said implement has at least one housing
2 compartment accessible via said removable housing part or cover for storing at least one
3 energy storage device.

1 45. A pocket tool as in claim 42, wherein sections of said housing parts of said housing
2 case have at least one compartment for said lighting means and/or a power consumer.

1 46. A pocket tool as in claim 45, wherein said compartment is open towards the outside
2 between said housing parts at an end face on said a first slim face and said lighting means
3 projects slightly beyond said first slim face.

1 47. A pocket tool as in claim 1, wherein said housing case is provided with a stop nose
2 on a slim face lying opposite said lighting means, said stop nose being configured to be
3 supported on a bearing surface in said housing body when said implement is in said stowed
4 position.

1 48. A pocket tool as in claim 47. wherein said housing case is disposed on a slim face
2 lying opposite said lighting means and offset from said stop nose and is provided with a
3 gripping piece projecting slightly beyond said housing body when said implement is in said
4 stowed position.

1 49. A pocket tool as in claim 1, wherein at least one other implement is disposed on a
2 slim face of said pocket tool opposite said first implement, said at least one other implement

3 being designed to be displaced relative to said housing body out of said stowed position
4 inside said housing body into said operating position outside said housing body.

1 50. A pocket tool as in claim 49, wherein said pocket tool can be supported on a
2 working surface by means of a support surface of said other implement when moved out of
3 said housing body.

1 51. A switch connecting mechanism for a switch contact in an implement of a pocket
2 tool, said switch connecting mechanism comprising a retaining arm extending in a
3 longitudinal direction and having a first terminal end and a second terminal end lying
4 opposite said first terminal end, wherein:
5 said retaining arm:
6 is longitudinally slidable in a region of said first terminal end on a switch
7 block extending parallel to said longitudinal direction;
8 is pivotably seated relative to a first bearing surface;
9 sits on a guide block in a region of said second terminal end so as to be
10 longitudinally guided; and
11 has a bending-resistant rocker arm section extending across less than half of
12 the length of said retaining arm perpendicular to said first bearing surface and a
13 flexible arm section extending along the remainder of the length of the retaining
14 arm;
15 and
16 said flexible arm section of said retaining arm tapers towards its oppositely lying
17 terminal end; and
18 an opposite contact co-operates with said switch contact on said second terminal end
19 of said flexible arm section in a displacement region between a deformed initial position of
20 said flexible arm and an extended operating position of said flexible arm.

1 52. A switch connecting mechanism as in claim 51, wherein:
2 said switch connecting mechanism further includes an operating element; and
3 said retaining arm or said operating element can be locked in said initial position
4 and/or said operating position.

1 53. A switch connecting mechanism as in claim 52, wherein:
2 said switch connecting mechanism is provided in an implement as in claim 1; and

3 said implement is provided with a catch recess on said retaining arm or said
4 operating element for locating with said catch nose.

1 54. A switch connecting mechanism as in claim 51, further comprising an operating
2 element, wherein:

3 said switch connecting mechanism is provided in an implement as in claim 1;
4 said bending-resistant rocker arm section incorporates said operating element
5 projecting out from said freely accessible other slim face of said housing case; and
6 said operating element extends in said longitudinal direction of said retaining arm.

1 55. A switch connecting mechanism as in claim 51, further comprising an operating
2 element, wherein:

3 said switch connecting mechanism is provided in an implement as in claim 1;
4 said operating element is designed to be displaceable against said spring action of
5 said retaining arm in said region of said resiliently elastic flexible arm section in the
6 direction of an axis extending perpendicular to said longitudinal extension of said retaining
7 arm and/or parallel to said longitudinal extension of said retaining arm.

1 56. A switch connecting mechanism as in claim 51, wherein:

2 said retaining arm is provided with a guide mechanism against which said switch
3 contact is mounted so that said retaining arm can be guided; and
4 said first switch contact is coupled with said retaining arm in displacement.

1 57. A switch connecting mechanism as in claim 56, wherein said guide mechanism is
2 arranged on a side face of said retaining arm and has at least two spaced apart guide webs
3 between which said switch contact is guided.

1 58. A switch connecting mechanism as in claim 57, wherein said switch contact has
2 several bends in its longitudinal extension, and is guided on said switch block and on at
3 least one of said guide webs when said retaining arm is in said operating position.

1 59. A switch connecting mechanism as in claim 51, wherein said electrically conductive
2 switch contact is in the form of a resiliently elastic leaf spring electrically connected to a
3 terminal contact of a power consumer, or is in the form of a terminal wire of the power
4 consumer.

1 60. A switch connecting mechanism as in claim 51, wherein a free end of said switch
2 contact extends from said second terminal end of said retaining arm.

1 61. A pocket tool comprising:
2 a housing body;
3 and at least one implement displaceable out of a stowed position inside said housing
4 body into an operating position outside said housing body;
5 at least one lighting means;
6 an opposite contact; and
7 an operating button;
8 wherein:
9 said at least one implement has a housing case with two mutually opposite side faces
10 and a slim face extending therebetween;
11 said lighting means and said operating button are arranged on said slim face of said
12 housing case;
13 said operating button is connected by means of a shaft to a retaining arm;
14 said retaining arm is displaceable between a non-operating position and an operating
15 position, and has spaced apart guide webs on one of its side faces between which a terminal
16 wire of said lighting means is guided; and
17 said terminal wire of said lighting means sits apart from said opposite contact when
18 said retaining arm is in said non-operating position and sits against and is electrically
19 connected to said opposite contact when said retaining arm is in said operating position.

1 62. A pocket tool comprising:
2 a housing body having a longitudinal axis and a storage area therein;
3 more than one implement housed within said housing and including a first
4 implement displaceable along a displacement plane from a stowed position inside said
5 storage area of said housing body to an operating position outside said housing body;
6 wherein:
7 said first implement includes a housing case housing a lighting means generating a
8 beam of light; and

9 said lighting means is movable with respect to said housing body along said
10 displacement plane to place said beam of light at angle to said housing body longitudinal
11 axis and in said displacement plane.